

LISTING OF THE CLAIMS

The following listing of the claims replaces all prior claim listings and versions in the application:

1. (Currently Amended) A sequence casting process for the continuous production of a high-purity cast metal strand from a metal melt, ~~preferably a steel melt, the metal melt being fed the process comprising:~~

~~feeding the metal melt~~ in controlled fashion from a melt vessel to a tundish; and
~~and being discharged discharging the metal melt~~ in controlled fashion from this ~~the~~ tundish into a continuous-casting mold, and the ~~supply feeding of the~~ metal melt into the tundish being interrupted during the ~~a~~ change of melt vessel[[],] whereas ~~while~~ the ~~supply discharging~~ of the metal melt into the continuous-casting mold is continued,

wherein during a first period of time starting from the ~~a~~ resumption of the ~~supply feeding~~ of ~~the~~ metal melt into the tundish until the ~~a~~ point at which a quasi-steady-state operation bath level in the tundish is reached, the ~~an~~ inflow rate into the tundish is greater than the ~~an~~ outflow rate out of the tundish, and such that for 70 % to 100 %[[],] preferably for the 70 % to 99 %, in particular for 70 % to 95 %[[],] of this the first period of time the inflow rate into the tundish is less than or equal to double[[],] preferably less than or equal to 1.5 times[[],] the outflow rate out of the tundish.

2. (Currently Amended) The sequence casting process as claimed in claim 1, wherein the inflow rate into the tundish corresponds to at least 0.5 times the ~~a~~ maximum inflow rate during quasi-steady-state casting operation.

3. (Currently Amended) The sequence casting process as claimed in claim 1, wherein the ~~supply feeding of the~~ metal melt within the last 5 % to 30 % of the first period of time from the resumption of the supply of metal melt into the tundish until the point at which the quasi-steady operating bath level is reached takes place at an inflow rate which is reduced compared to the inflow rate during the ~~a~~ preceding period of time.

4. (Currently Amended) The sequence casting process as claimed in Claim claim 1, wherein the supply feeding of the metal melt takes place at a substantially an initial filling rate that is a maximum inflow rate immediately on the resumption of the supply feeding of the metal melt into the tundish for 0.1 % to 30 %[.,.] preferably for 3 % to 15 %[.,.] of the first period of time until the point at which the quasi-steady operating bath level in the tundish is reached, and thereafter the supply feeding of the metal melt takes place at a filling rate which is reduced compared to the initial filling rate, until the point at which the quasi-steady operating bath level is reached an end of the first period of time.

5. (Currently Amended) The sequence casting process as claimed in Claim claim 3, wherein the reduced filling rate follows a time curve which decreases continuously or decreases in steps.

6. (Currently Amended) The sequence casting process as claimed in Claim claim 1, wherein the supply feeding of the metal melt into the tundish is interrupted for a second period of time when during which the quasi-steady-state operating operation bath level is reached.

7. (Currently Amended) The sequence casting process as claimed in claim 6, wherein the second period of time for which the supply of melt is interrupted lasts between 1 sec second and 2 min minutes[.,.] preferably between 10 sec and 70 sec.

8. (Currently Amended) The sequence casting process as claimed in Claim claim 1, wherein a region of the a free bath surface in the tundish which immediately surrounds the surrounding a shroud is kept free of coverage with a covering agent at least during the quasi-steady-state operation and preferably all the time.

9. (Currently Amended) The sequence casting process as claimed in Claim claim 6, wherein after the resumption of the supply feeding of the metal melt into the tundish, this supply the feeding of the metal melt into the tundish is controlled quantitatively as a function of the discharge of the metal melt from the tundish.

10. (Currently Amended) The sequence casting process as claimed in Claim claim 1, wherein the supply feeding of the metal melt into the tundish is controlled quantitatively as a function of the discharge of the metal melt from the tundish at least for 70% to 100%[,.] preferably for 70% to 99%, in particular for 70% to 95%[,.] of the first period of time from the resumption of the supply of metal melt into the tundish until the point at which a quasi-steady operating bath level is reached in the tundish and/or or from the point at which the quasi-steady-state operating operation bath level is reached.

11. (Currently Amended) The sequence casting process as claimed in Claim claim 1, wherein the a quantity of the metal melt supplied fed to the tundish and the a quantity of the metal melt discharged from the tundish during casting of a steel strip on a two-roller casting installation is between 0.5 t/min minutes and 4.0 t/min minutes, preferably between 0.8 t/min and 2.0 t/min.

12. (Currently Amended) The sequence casting process as claimed in Claim claim 1, wherein further comprising adding a covering agent is added onto the a bath surface of the metal melt in the tundish on demand[,.] and this addition of a covering agent onto the bath surface of the metal melt takes place in a surface region with a low surface flow velocity, waviness of the bath surface or turbulence intensity.

13. (Currently Amended) The sequence casting process as claimed in claim 12, wherein the covering agent is applied added in fine-grain or powder form[,.] preferably using a semi-automatic or a fully automatic addition device.

14. (Currently Amended) The sequence casting process as claimed in Claim claim 1, wherein further comprising setting and monitoring the quasi-steady-state operating operation bath level is set and monitored by means of a tundish weight measurement or by means of an equivalent measurement method.

15. (Currently Amended) The sequence casting process as claimed in Claim claim 1, wherein further comprising dividing by a divider plate at least during the first period of time between the

resumption of the supply of the metal melt into the tundish and the point at which the quasi-steady operating bath level is reached[[,]] the metal melt contained in the tundish is divided by a divider plate into two partial quantities, the metal melt from the melt vessel being fed to a first partial quantity and the metal melt being discharged from a second partial quantity into the continuous-casting mold, and the metal melt being transferred continuously from the first partial quantity to the second partial quantity, the inflow rate to the first partial quantity in the tundish being greater than the outflow rate from the second partial quantity, and the inflow rate to the first partial quantity being less than or equal to double the outflow rate from the second partial quantity for 70% to 100%[[,]] preferably for 70% to 99%, in particular for 70% to 95%[[,]] of the first period of time from the resumption of the supply of metal melt into the tundish until the point at which the quasi-steady operating bath level of the second partial quantity in the tundish is reached.

16. (Currently Amended) The sequence casting process as claimed in claim 15, wherein the supply feeding of the metal melt within the last 5% to 30% of the first period of time from the resumption of the supply of metal melt into the tundish until the point at which the quasi-steady operating bath level of the second partial quantity in the tundish is reached takes place at an inflow rate which is reduced compared to the inflow rate during the a preceding period of time.

17. (Currently Amended) The sequence casting process as claimed in claim 15, wherein the supply feeding of the metal melt takes place at a substantially maximum inflow rate immediately on the resumption of the supply feeding of the metal melt into the tundish for 1% to 30%[[,]] preferably for 3% to 15%[[,]] of the first period of time until the point at which the quasi-steady operating bath level of the second partial quantity in the tundish is reached, and thereafter the supply feeding of the metal melt takes place at a filling rate which is reduced compared to this the maximum inflow rate until the a point at which the operating quasi-steady-state operation bath level of the second partial quantity in the tundish is reached.

18. (Currently Amended) The sequence casting process as claimed in Claim claim 15, wherein further comprising transferring the metal melt is transferred from the first partial quantity to the second partial quantity through one or more openings in the divider plate.

19. (Currently Amended) The sequence casting process as claimed in Claim 15, wherein the metal melt is transferred from the first partial quantity to the second partial quantity through a free space between the divider plate and the a base of the tundish.

20. (Currently Amended) The sequence casting process as claimed in Claim 15, wherein when the a quasi-steady-state operating operation bath level of the second partial quantity of the metal melt in the tundish is reached, the supply feeding of the metal melt into the tundish is controlled quantitatively as a function of the discharge of the metal melt from the tundish.

21. (New) The sequence casting process as claimed in claim 1, wherein the metal melt is a steel melt.

22. (New) The sequence casting process as claimed in claim 1, wherein for 70 % to 99 % of the first period of time the inflow rate into the tundish is less than or equal to double the outflow rate out of the tundish.

23. (New) The sequence casting process as claimed in claim 1, wherein for 70 % to 95 % of the first period of time the inflow rate into the tundish is less than or equal to double the outflow rate out of the tundish.

24. (New) The sequence casting process as claimed in claim 23, wherein the inflow rate into the tundish is less than or equal to 1.5 times the outflow rate out of the tundish.

25. (New) The sequence casting process as claimed in claim 1, wherein the feeding of the metal melt takes place at an initial filling rate that is a maximum inflow rate immediately on the resumption of the feeding of the metal melt into the tundish for 3 % to 15 % of the first period of time, and thereafter the feeding of the metal melt takes place at a filling rate which is reduced compared to the initial filling rate, until an end of the first period of time.

26. (New) The sequence casting process as claimed in claim 6, wherein the second period of time lasts between 10 seconds and 70 seconds.